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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/681,507	10/07/2003	Michael A. Vyvoda	3558P027D	9650
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8791 7590 12/14/2004

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EXAMINER

SCHILLINGER, LAURA M

ART UNIT	PAPER NUMBER
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2813

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Election/Restrictions

Claims 13-67 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected claims, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 12/02/04.

Applicant's election with traverse of claims 1-12 in the reply filed on 12/02/04 is acknowledged. The traversal is on the ground(s) that claim 1 is generic to all species. This is not found persuasive because claim 1 is not generic to device claims (claim 25) and therefore is not generic to all species.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-10 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted prior art (US serial number 09/927648-Lee et al) .

The following claimed limitations as cited below are based upon Applicant's admitted prior art.

The citations labeled "Admitted prior art" refer to Applicant's own specification. Citations listing Page and line number refer to the specification of serial number 09/927648, itself.

1. (Original) A method of forming an active device, the method comprising: performing a first patterning operation on a first plurality of layers, the first patterning operation defining a first feature of the active device (Admitted prior art page 3 [0008]); and performing a second patterning operation on at least one patterned layer of the first plurality of layers, the second patterning operation defining a second feature of the active device, wherein the first and second patterning operations are performed substantially back-to-back (Admitted prior art, page 3 [0008]).

2. (Original) The method of Claim 1, wherein the first patterning operation includes: etching the first plurality of layers into a first plurality of strips oriented in a first direction (Admitted prior art page 3 [0008]).

3. (Original) The method of Claim 2, wherein the second patterning operation includes: etching at least one strip of the first plurality of strips in a second direction, the second direction being different than the first direction, to create a pillar (Admitted prior art page 3 [0008]).

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4. (Original) The method of Claim 3, wherein at least one strip of the first plurality of strips comprises a first terminal of the active device (pages 34-35, lines: 25-25) .

5. (Original) The method of Claim 4, wherein the pillar comprises another portion of the active device (pages 34-35, lines: 25-25).

6. (Original) The method of Claim 4, further including: depositing a first dielectric after both first and second patterning operations; and planarizing the first dielectric to expose a surface of the active device (page 38, lines: 1-10).

8. (Original) The method of Claim 6, further including: depositing a second plurality of layers on the surface of the active device and the first dielectric; and etching the second plurality of layers into a second plurality of strips oriented in the second direction (page 38, lines: 25-32).

9. (Original) The method of Claim 8, wherein said second plurality of strips is not self- aligned to the pillar (Page 38, lines: 25-32).

10. (Original) The method of Claim 8, wherein at least one strip of the second plurality of strips comprises a second terminal of the active device (page 40, lines: 20-35).

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted prior art US serial number 09/927648-Lee et al as applied to claim 1 above, and further in view of Li et al ('530).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

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11. (Original) The method of Claim 1, wherein the first plurality of layers includes an antifuse layer fully etched through by the first patterning operation, but not fully etched through by the second patterning operation (Fig.5 (114) and Col.5, lines: 50-65).

12. (Original) The method of Claim 1, wherein the first plurality of layers includes an antifuse layer fully etched through by both the first and second patterning operations (Fig.5 (114) and Col.5, lines: 50-65).

It would have been obvious to one of ordinary skill in the art to modify Lee et al to further include an etched antifuse layer as taught by Li et al because it acts to protect the circuit from dielectric rupture (Li et al-Col.4, lines: 60-65).

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter: 7. Prior art of record fails to teach nor suggest the method of Claim 6, further including performing a cleaning step after planarizing. Consequently, claim 7 contains allowable subject matter.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


LMS

12/6/04